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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
02/25/98	01/23/97	LITTLE	17-15453-90012

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IEJ	EXAMINER
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ART UNIT 1743	PAPER NUMBER
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DATE MAILED: 03/19/98

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

Office Action Summary

Application No.

08/786,988

Applicant(s)

Little et al.

Examiner

Long V. Le

Group Art Unit

1313



☐ Responsive to communication(s) filed on _____

☐ This action is **FINAL**.

☐ Since this application is in condition for allowance except for formal matters, **prosecution as to the merits is closed** in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

A shortened statutory period for response to this action is set to expire THREE month(s), or thirty days, whichever is longer, from the mailing date of this communication. Failure to respond within the period for response will cause the application to become abandoned. (35 U.S.C. § 133). Extensions of time may be obtained under the provisions of 37 CFR 1.136(a).

Disposition of Claims

☒ Claim(s) 1-39 is/are pending in the application.

Of the above, claim(s) _____ is/are withdrawn from consideration.

☐ Claim(s) _____ is/are allowed.

☒ Claim(s) 1-39 is/are rejected.

☐ Claim(s) _____ is/are objected to.

☐ Claims _____ are subject to restriction or election requirement.

Application Papers

☒ See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.

☐ The drawing(s) filed on _____ is/are objected to by the Examiner.

☐ The proposed drawing correction, filed on _____ is ☐ approved ☐ disapproved.

☐ The specification is objected to by the Examiner.

☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119

☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).

☐ All ☐ Some* ☐ None of the CERTIFIED copies of the priority documents have been

☐ received.

☐ received in Application No. (Series Code/Serial Number) _____

☐ received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

*Certified copies not received: _____

☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

Attachment(s)

☒ Notice of References Cited, PTO-892

☒ Information Disclosure Statement(s), PTO-1449, Paper No(s). 3

☐ Interview Summary, PTO-413

☒ Notice of Draftsperson's Patent Drawing Review, PTO-948

☐ Notice of Informal Patent Application, PTO-152

--- SEE OFFICE ACTION ON THE FOLLOWING PAGES ---

DETAILED ACTION

Drawings

1. This application has been filed with informal drawings which are acceptable for examination purposes only. Formal drawings will be required when the application is allowed.

Claim Rejections - 35 USC § 112

2. Claims 2, 4, 5 and 25-30 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 2, "a substrate" is confusing and indefinite as to whether it is the same substrate recited in claim 1. Same deficiency is found in claim 27.

Claim 4, "the solvent of said matrix material" lacks antecedent basis.

Claim 25, line 7, "second location" (second occurrence) should be --first location--.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. The factual inquiries set forth in *Graham v. John Deere Co.*, 148 USPQ 459, that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or unobviousness.

5. Claims 1-39 are rejected under 35 U.S.C. 103(a) as being unpatentable over Deeg et al. (USP 5,338,688) in view of Pfof et al. (USP 5,108,703).

Deeg et al. disclose a method for analyzing a material substantially as claimed. The method comprises the steps of providing a vesicle 3 having an interior chamber containing a fluid, disposing the vesicle 3 adjacent a first location on the surface of a substrate 16, controlling the vesicle to eject from the chamber a nanoliter volume of the fluid to dispense the fluid at the first location of the surface of the substrate, and moving the substrate to a set of positions so that fluid is dispensed from the vesicle at each location of the set for forming an array of sample material. The method of the instant invention differs from that of Deeg et al. in that the vesicle is moved to a set of positions instead of the substrate. However, such a movable vesicle is considered conventional in the dispensing art, see Pfof et al. Pfof et al. teach an automated analytical system including the step of moving a vesicle 54 in a predetermined positions adjacent the surface of a substrate 27 (figure 1 and Background of the Invention).

Accordingly, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have provided the method of Deeg et al. with the step

of moving the vesicle, as taught by Pfost et al., since such a movable vesicle for transferring fluid is considered conventional in the automated fluid dispensing art.

Conclusion

6. No claims are allowed.

7. References: Gallant, Hewett et al., Noss et al., Brigati, Hayes et al., Rosenthal et al., Schramm, Johnson et al., Hanaway et al., Mills, Leighton et al., Tseung et al., Northrup et al., Jones, Sargent et al., Heller et al., Eggers et al. and Winkler et al. are cited as art of interest for the teachings of pipetting mechanisms and biological molecule detection methods.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Long V. Le whose telephone number is (703) 305-3399.

Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is (703) 308-0651.



Long V. Le
Primary Patent Examiner, Art Unit 1313
March 11, 1998.